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#### (71) Applicant(s)

Nihon Kenko Zoushin Kenkyukai Corporation

#### (Incorporated in Japan)

30-30 Najima 1-chome, Higashi-ku, Fukuoka-shi, Fukuoka 813, Japan

- (72) Inventor(s)
  Isamu Masuda
- (74) Agent and/or Address for Service
  Marks & Clerk
  57-60 Lincoln's Inn Fields, LONDON, WC2A 3LS,
  United Kingdom

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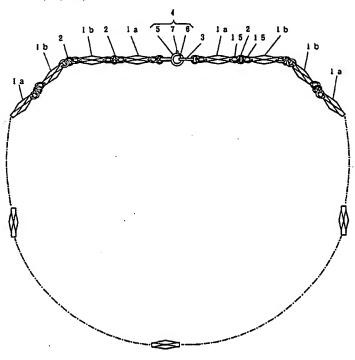
EP 0035932 A1

US 5195335 A

#### (54) Magnetic necklace

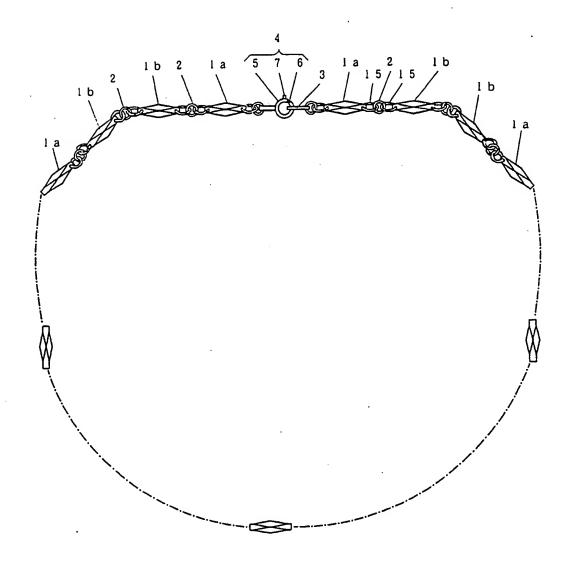
(57) A magnetic necklace is constituted by forming all or some of a plurality of ornaments of permanent magnets. Each ornament 1a made of a permanent magnet is formed into a polyhedron having a plurality of cut faces and and so magnetized that the N and S magnetic poles generate on sides perpendicular to the direction of connecting the ornaments. The ornaments 1b are non-magnetic, eg. aluminium, and all the ornaments may be gold-plated.

F | G. 1

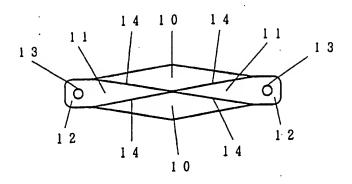


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F I G. 1



F I G. 2



F | G. 3

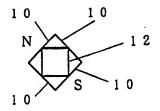


FIG. 4

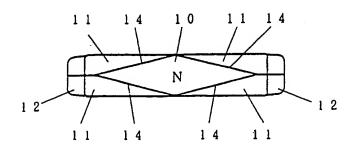


FIG. 5

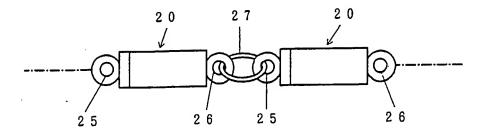
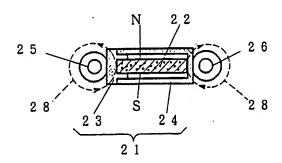


FIG. 6



## SPECIFICATION

## MAGNETIC NECKLACE

## Technical Field

This invention relates to a necklace formed by connecting a plurality of ornaments in series and, more particularly, to a magnetic necklace formed of a plurality of ornaments all or a part of which are permanent magnets.

10 Background Art

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It is conventionally well known that exertion of a magnetic field on a human body is effective to improve circulation of blood and to eliminate stiffness or pains, and recently various therapeutic apparatus and health appliances using this principle have been proposed.

A magnetic necklace is one such example of these apparatus and appliances, wherein all or a part of a plurality of ornaments are formed of permanent magnets, and all the ornaments are connected in series by connective rings.

Figs. 5 and 6 show examples of the ornaments 20 used for magnetic necklaces of this type.

This ornament 20 is so structured that a pillar-shaped permanent magnet 22 is installed in a cylinder

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case 21 of non-magnetic material. Said cylinder case 21 is composed of a pair of cap bodies 23. 24 each having one open end engaged with each other, and at the other ends of the cap bodies 23. 24, coupling holes 25. 26 for connecting a coupling ring 27 are formed.

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Said permanent magnet 22 is so magnetized that N and S magnetic poles are diametrically generated and is so arranged that when a magnetic necklace using these ornaments 20 is installed on a neck portion of a human body, magnetic lines of force started at the N magnetic pole are exerted on the human body.

However, in the case of using an ornament 20 having such a structure, the cylinder case 21 interposes between the permanent magnet 22 and a human body. Therefore, the intensity of magnetic fields exerted on the human body decreases.

Furthermore, when using the pillar-shaped permanent magnet 22, magnetic lines of force 28 concentrate to peripheral portions of the cylinder end portion, thus not only a range of exerting the magnetic fields on the human body is narrowed but loops of the magnetic lines of force are made small, therefore there arises a problem that the magnetic lines of force do not act deep into the human body, and thus a magnetic therapeutic effect is poor.

Object of the Invention

The object of the invention is to provide a magnetic necklace which can greatly improve a magnetic therapeutic effect by forming ornaments with permanent magnets and forming a shape of the ornament into a polyhedron.

## Disclosure of the Invention

This invention is a magnetic necklace in which a plurality of ornaments are connected in series by connective means, characterized by that all or a part of the plurality of ornaments are formed of permanent magnets, and each ornament made of a permanent magnet is formed into a polyhedron having a plurality of cut faces and so magnetized that the magnetic poles N and S are generated on sides perpendicular to the direction of connecting the ornaments.

Preferably, the ornaments formed of permanent magnets are formed entirely of permanent magnet material. Preferably, the ornaments are defined in their central sections by 4 lozenged shaped faces each touching the next lozenged shaped face at 1 vertex and lying in a plane at 90 degrees to the plane of the neighbouring lozenge shaped face, generally triangular faces lying between the lozenged shaped faces.

a part of the plurality of ornaments having been formed of permanent magnets, magnetic lines of force directly give effect on a human body and magnetic fields' each of Furthermore. intensity is increased. of a permanent magnet is formed ornament made having a plurality of cut faces and polyhedron magnetized that the magnetic poles N and S are generated direction of the sides perpendicular to both on

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connecting the ornaments, therefore the magnetic lines of force concentrate along each crest line forming a borderline between a cut face and an adjacent cut face, and thus magnetic fields exert on a human body over a wide range. Moreover, loops of magnetic lines of force, become large, thereby the magnetic lines of force act deep into the human body, and the magnetic therapeutic effect is improved.

The invention will be further described by way of example with reference to the accompanying drawings in which:

10 Brief Description of the Drawings

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Fig. 1 is a plan view showing a configuration of a magnetic necklace of one embodiment of the invention.

Fig. 2 is a front view showing a configuration of an ornament.

Fig. 3 is a side view showing a configuration of an ornament.

Fig. 4 is a plan view showing a configuration of an ornament.

Fig. 5 is a plan view showing a part of a conventional magnetic necklace.

Fig. 6 is a sectional view showing a configuration of an ornament used for the magnetic necklace of Fig. 5.

Best Mode for Carrying out the Invention

Fig. 1 shows an appearance of a magnetic necklace according to one embodiment of the invention. This magnetic necklace is made by connecting a plurality of ornaments 1a and 1b by connective rings 2 in series, and the ornament 1a at one end is provided with a large diameter connective ring 3, and the ornament 1a at the other end is equipped with a clasp 4 connectable and disconnectable with said connective ring 3 respectively.

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Said clasp 4 is comprised of a ring-shape hollow tube 5 having an open portion and an axis-like shutter 6 slidably inserted into this ring-shape hollow tube 5, the shutter 6 being biassed so as to shut said open portion by a spring which is not shown. The shutter 6 retreats into the hollow tube 5 by operation of a knob 7 to open said open portion.

Among a plurality of ornaments 1a and 1b, the ornament 1a arranged every two ornaments 1b is formed of a permanent magnet plated with gold. The two-arranged ornaments 1b between the ornaments 1a and 1a are formed of non-magnetic material such as aluminum plated with gold.

As shown in Fig. 2 to Fig. 4, each ornament la made of a permanent magnet is a polyhedron which is long in the direction of connection, which has four rhombic cut

faces 10 and total eight triangular cut faces 11 interposed between adjacent rhombic cut faces 10 on the peripheral surface, and both ends of the polyhedron are integrally provided with a square-section axial portion 12 protrusively.

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The respective rhombic cut faces 10 and triangular cut faces 11 face directions substantially perpendicular to the direction of connecting of the ornaments 1a, and each ornament 1a is so magnetized that the N magnetic pole generates on any one of the rhombic cut faces 10 and the S magnetic pole generates on the rhombic cut face 10 on the reverse side respectively.

In addition, the ornament 1b made of non-magnetic material is formed into the same shape as the ornament 1a made of a permanent magnet, however, the ornament 1b is not necessarily required to be formed into a polyhedron.

The square-section axial portions 12 at both ends of respective ornament 1a and 1b are provided with connective holes 13 bored in diametric direction, and to each connective hole 13. a ring 15 is connected. furthermore between the ring 15 and a ring 15 of adjacent ornament, said connective ring 2 is connected.

When the magnetic necklace configured as mentioned above is installed on the neck portion of a human body,

magnetic lines of force generate from the N-magnetic pole of an ornament la made of a permanent magnet in the directions perpendicular to the direction of the connection and act on the human body, penetrate the human body and return to the S-magnetic pole.

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In this case, the magnetic lines of force concentrate along each crest line 14 forming a border line between a rhombic cut face 10 and an adjacent triangular cut face 11, thereby a range of exerting a magnetic fields on a human body is widened, and the magnetic lines of force draw large loops, thereby acting deep in the human body.

In addition, in the above embodiment, the ornaments la made of permanent magnets and the ornaments 1b made of disposed mixedly are material non-magnetic predetermined arrangement order, however the necklace is this configuration. but to limited not constituted, for example, by all the ornaments la made of permanent magnets without using the ornaments 1b made of non-magnetic material.

The invention has been described above by way of example only, and modification can be made within the invention.

#### Claims:

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1. A magnetic necklace in which a plurality of ornaments are connected in series by connective means, wherein:

all or a part of said plurality of ornaments are formed of permanent magnets; and

each ornament made of a permanent magnet is formed into a polyhedron having a plurality of cut faces and so magnetized that respective N and S magnetic poles generate on faces perpendicular to the direction of connecting the ornaments.

- 2. A magnetic necklace in which a plurality of ornaments are connected in series by connective means, wherein:
- at least some of the ornaments are formed of permanent magnets; and

each ornament made of a permanent magnet is formed into a polyhedron having a plurality of cut faces and magnetised so that magnetic lines of force are generated extending from the N magnetic pole in a direction perpendicular to the direction of connection of the ornaments.

3. A magentic necklace substantially as herein described with reference to figures 1 to 4 of the accompanying drawings.

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Patents Act 1977 Examiner's report (The Search report	xaminer's report to the Comptroller under Section 17	
Relevant Technical Ficius		Search Examiner D C BRUNT
(i) UK Cl (Ed.M)	A3H (H3, H7) A5R (RHFMP, RHXT)	
(ii) Int Cl (Ed.5)	A44C (5/00, 11/00, 13/00) A61N (2/08)	Date of completion of Search 27 JUNE 1994
Databases (see below) (i) UK Patent Office collections of GB, EP, WO and US patent specifications.		Documents considered relevant following a search in respect of Claims:- 1-3
(ii) ONLINE DATA	ABASES: WPI	

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  E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.
- A: Document indicating technological background and/or state of the art.

  Member of the same patent family; corresponding document.

Category	Id	Relevant to claim(s)	
х	EP 0035932 A1	(FLUX YANG) see Figure 1 and page 4 lines 17-21	1, 2
X	US 5195335	(HART) see column 2 lines 15-30	1, 2
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